

A NEW SPECIES OF *NEUROLAENA* (ASTERACEAE) FROM OAXACA,
MEXICO

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ABSTRACT

A new species, *Neurolaena jannaweissana* B.L. Turner, is described and illustrated from western Oaxaca. Its closest relationship is with *N. balsana*, a species of northwestern Guerrero, both taxa known by only a single collection. A revised key to the Mexican species of *Neurolaena* is provided, along with a newly constructed map showing their distributions.

KEY WORDS: Asteraceae, *Neurolaena*, México, Oaxaca

In my treatment of *Neurolaena* (Turner 1982), I recognized ten species, most of these occurring in México. I added two additional Mexican species, *N. wendtii* in 1985 and *N. lamina* in 1990; these and the present addition bring to thirteen the number of taxa now recognized in *Neurolaena*, ten of these occurring in México. A key to the Mexican species follows, along with two maps showing their distributions.

KEY TO MEXICAN SPECIES

1. Heads radiate; Oaxaca *N. oaxacana*
1. Heads discoid. (2)
 2. Pales (chaff) about 2/3 as long or longer than the subtended florets. (4)
 2. Pales (chaff) of receptacle much shorter than the subtended florets; leaves 30-60 cm long. (3)
3. Undersurface of blades prominently resinous-glandular; mid-ribs densely pubescent with long, dark brown, crisped, multi-cellular hairs (4-8 septate); pedicels densely brown-tomentose; achenes glabrous; Veracruz.....*N. venturana*



HOLOTYPE OF *Neurolaena jannaweissana*
B. L. Turner
sp. nov.
L. S. Davis!

PLANTS OF MEXICO
DAPACA
Lauraceae

Neurolaena

Determined by:
District: Juquila
Municipio: Tataltepec de Valdéz
Comunidad: Tataltepec de Valdéz
Lat/Long: 21°27'01" N 101°12' W Alt: 1100m
pino fresco above Tataltepec, E of C. La Chircho, along
path towards Elmo Verde (400-1200m)
Collector: James M. Smith 1997 5 Jan 1998
(UNIVERSITY OF TEXAS AT AUSTIN (TEXAS))

2 cm

Fig. 1. *Neurolaena jannaweissana* (holotype).



Fig. 2. Distribution of *Neurolaena lobata* in Mexico.



Fig. 3. Distribution of *Neurolaena* spp. in Mexico (other than *N. lobata*).

3. Undersurface of blades not, or inconspicuously, glandular beneath; mid-ribs moderately to sparsely pubescent with short, white, usually appressed hairs (2-5 septate); pedicels appressed white-hispid; achenes pubescent; SE Chiapas. *N. macrophylla*
- 4(2). Heads 6-12(-14) mm across (pressed); middle series of involucre bracts linear, 1-2 mm wide. (5)
4. Heads 14-16 mm across (pressed); middle series of involucre bracts narrowly ovate to ovate-orbicular, (2.0-)2.5-4.5 mm wide. (9)
5. Undersurface of blades rather evenly soft pubescent (if hairs confined to the ribs only, the pubescence then fine and appressed). (7)
5. Undersurface of blades coarsely hispid along the veins only, not evenly soft pubescent or densely resinous-glandular. (6)
6. Achenes very sparsely atomiferous-glandular; pales 2-3 mm shorter than the subtended florets; Oaxaca. *N. jannaweissana*
6. Achenes densely atomiferous-glandular throughout; pales about as long as the subtended florets; Guerrero. *N. balsana*
- 7(5). Leaves entire to faintly crenate or rarely weakly serrate, never lobed; involucre bracts glabrous or nearly so, the middle series mostly 1 or 2-nerved; pales exceeding the subtended florets; branches of capitulescence densely fulvous(greenish-yellow) tomentose; Chiapas. *N. fulva*
7. Leaves serrate to variously lobed (the uppermost ones sometimes entire or nearly so); involucre bracts mostly variously puberulent, usually 3-nerved; pales shorter than the subtended florets; branches of the capitulescence variously short-hispid, the hairs brownish, not greenish-yellow. (8)
8. Leaves thin, very sparsely pubescent beneath, not at all glandular-atomiferous, the margins unlobed; southern Veracruz, eastern Oaxaca. *N. lamina*
8. Leaves thick, densely pubescent beneath and atomiferous-glandular, the margins frequently deeply 3-lobed; widespread. *N. lobata*
- 9(4). Outer involucre bracts appressed, broadly ovate, without terminal hirsute appendages; coastal Veracruz. *N. macrocephala*
9. Outer involucre bracts loose, narrowly lanceolate with terminal hirsute appendages; easternmost Oaxaca and closely adjacent Veracruz. *N. wendtii*

NEUROLAENA JANNAWEISSANA B.L. Turner, *spec. nov.* Figure 1.
 TYPE: MEXICO. Oaxaca: Distrito Juquila, Mpio. Tataltepec de Valdez, pine forest near Tataltepec, E of La Chinche (ca. 16° 21' N, 97° 33' W), along path towards Llano Verde, ca. 1000 m, 5 Jan 1994, *Janna Weiss 687* (HOLOTYPE: TEX).

Similis *N. balsanae* B.L. Turner sed foliis integris (vice foliorum dentatorum), achenis glabris aut paene glabris (vice dense glandulosorum), et paleis flosculis subtentis 2-3 mm brevioribus (vice aequalium aut longiorum).

Suffruticose herb or shrublet to 1 m high or more. Stems about 8-striate, moderately pubescent with short, somewhat down-curved hairs. Leaves alternate, 12-21 cm long, 3-4 cm wide; petioles 1-3 cm long, gradually tapering into the blades; blades pinnately veined, about equally tapered at both ends, the lower veins more pronounced than the upper, the surfaces moderately hispidulous, mostly along the major veins, margins entire or nearly so. Inflorescence composed of about 30 heads arranged in terminal clusters, the latter ca. 8 cm high, 10 cm across, the ultimate peduncles 8-14 mm long. Heads eradiate; involucre ca. 9 mm high, 14 mm wide (pressed); involucre bracts about 5-seriate, rather evenly imbricate, the outer series acute apically, the middle and inner series obtuse or rounded, the middle series linear-lanceolate, 1-nervate, ca. 1 mm wide. Receptacle ca. 2.5 mm across, ca. 0.5 mm high, the linear pales scarious, ca. 6 mm long, 2-3 mm shorter than the subtended florets. Florets numerous (40+) to a head; corollas yellow, glabrous, ca. 6 mm long, the tubes ca. 3 mm long, throat ca. 2.1 mm long, and the lobes ca. 0.9 mm long. Achenes ca. 2 mm long, black, the surfaces minutely black-warty, otherwise very sparsely atomiferous-glandular, and having a few scattered hairs; pappus of 40-50 whitish bristles ca. 6 mm long.

Because of its reduced pales, this taxon will key to, or near, *Neurolaena venturana*, in my taxonomic treatment of *Neurolaena* (Turner 1982). Its closest affinities, however, appear to be with *N. balsana* B.L. Turner, a species of northwestern Guerrero, to date known only by the type. *Neurolaena jannaweissana* differs from the latter in having shorter pales (as already noted), entire leaves, and nearly glabrous achenes (vs. densely atomiferous-glandular throughout).

It is a pleasure to name this species for Janna Weiss, newly crowned doctorate in botany at the University of Texas, Austin, Texas, her doctoral thesis (Weiss 1998) being an ethnobotanical study of the native peoples of western Oaxaca.

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